

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0038] of the printed publication with the following replacement paragraph:

[0038] In the heat output section 22 the heat conveyor medium condenses again so that there is a return flow in accordance with the arrows 30a and 30b outside of the capillary structure along the long walls of the pipe. As with the system of FIG. 1, the heat intake section 14a removes heat shown by arrows 16a and the heat output section 22a delivers heat shown by arrows 26a. FIG. 2, on the other hand, shows the heat intake section 14a as an evaporation zone, and the conveyance section 21a and the heat output section 22a as a condensation zone. The liquid conveyance results from a capillary effect and pressure equalisation.

Please replace paragraph [0039] of the printed publication with the following replacement paragraph:

[0039] FIG. 3 shows another variation of the piping system in accordance with the invention. In the example the piping system is in the form of a closed circuit 10b with a conveyance section 21b including a feed line and a discharge line between the heat intake section 14b and the heat output section 22b. With impulsion from the given drop in pressure and the force of gravity, the evaporated heat conveyance medium in the heat source 14b is conveyed to the heat reducer in the heat output section 22b, in accordance with the arrow 20b. If the temperature is sufficiently low here, the evaporated heat conveyance medium condenses and so discharges the condensation heat which is released as shown by arrows 26b. The resulting condensate flows over the condensate line back to the heat intake section,

driven by the force of gravity, in accordance with the arrow 30b. Then the condensed heat conveyance medium evaporates with intake of heat shown by arrows 16b. With the system in accordance with FIG. 3 one talks of a loop heat pipe (LHP).

Please replace paragraph [0049] of the printed publication with the following replacement paragraph:

[0049] In the first circuit 260 a cold storage unit 266 is provided which has a thermally insulating wall 268. The circuit 260 is designed with a first connection line 270, 272 over which the evaporated heat conveyance medium flows from the heat exchanger 234 to the coupling device 264. In addition, the first circuit includes two reverse lines 274, 276, along which the condensed heat conveyance medium can flow back to the heat exchanger 234. ~~Controllable regulation devices~~ regulator valves 278, 280 are provided in these reverse lines 274, 276.

Please replace paragraph [0051] of the printed publication with the following replacement paragraph:

[0051] The system in accordance with FIG. 6 functions as follows. In order to cool the device to be cooled 238 during normal operation, ie. during the flight operation of the aircraft, the second circuit 262 is essentially used. This works as described above with reference to FIGS. 4 and 5, ie. there is an intake of heat in the device to be cooled 238 and this heat is conveyed away by means of the condensed heat conveyance medium by means of the line 282 to the coupling device 264. Here, the heat is discharged to the cold external skin 232, whereby the heat conveyance medium condenses and flows back to the heat exchanger

288 via the reverse flow line 284. Again the regulation device 252 is operatively coupled to the ventilator 240 via control line 254, to the temperature sensor 250, and to the regulator valves 278, 280, 286 via control lines 256. The quantity of heat transferred by the flow of air 242 can be changed by altering the revolutions per minute of the ventilator 240 and by setting the regulator valve 286.

Please replace paragraph [0055] of the printed publication with the following replacement paragraph:

[0055] It should finally be noted that the heat exchangers 234 and [[238]] 288 in the device to be cooled can have parallel or serial flow in relation to the air flow 242 or 242'.